86 - 1314

No.

Supreme Court, U.S.
FILED
FEB 7 1987
JOSEPH SPANIOL, JR.
CLERK

# SUPREME COURT OF THE UNITED STATES

**October Term 1986**

---

*KARL E. HUBBARD,*

*PETITIONER*

*v.*

*COMMISSIONER OF PATENTS*

## ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

---

## PETITION

---

GEORGE E. KERSEY
300 Howard Street
Framingham, MA 01701
(317) 879-0511

*Counsel of Record*

Of Counsel:

THOMAS O. HOOVER
BARRY D. JOSEPHS
300 Howard Street
Framingham, MA 01701

## QUESTIONS PRESENTED

## FOR REVIEW

This Petition presents the following questions:

1. Is it correct to say that two chemicals useful for the same purpose obviously could be combined for that purpose in accordance with In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1972 (CCPA 1980)?

a. Is it not apparent, for example, that two chemicals such as sodium hydroxide and hydrochloric acid, well known cleaners, yield salt and water when combined, and not a cleaner?

2. Must unexpected results be argued when those results are fully reported in the Record below and are set forth as the basis for the invention?

b. Is it obvious to combine chemicals having the same general purpose when their specific effects in pursuit of that purpose are widely different?

3. Does it follow that even if a combination of two ingredients is obvious, a novel method employing the ingredients is obvious?

a. Is it appropriate for the Federal Circuit to affirm the rejection of a method without even mentioning the method or any of its aspects?

## LIST OF PARTIES

1. Karl E. Hubbard, Petitioner

2. Commissioner of Patents and Trademarks, Respondent.

## TABLE OF CONTENTS


| | Page |
|---|---|
| QUESTIONS PRESENTED..... | i |
| PARTIES ..... | iii |
| TABLE OF AUTHORITIES..... | viii |
| OPINIONS BELOW..... | 2,1a,3a |
| JURISDICTION..... | 2 |
| THE CONSTITUTIONAL PROVISION AND STATUTES INVOLVED..... | 3 |
| STATEMENT OF THE CASE..... | 5 |
| (a) The Inventions..... | 5 |
| (b) The Decisions of the Board..... | 7 |
| (c) The Decisions of the Federal Circuit..... | 7 |

REASONS FOR GRANTING THE WRIT

IA. TWO CHEMICALS WHICH ARE SAID TO BE USEFUL FOR THE SAME GENERAL PURPOSE CANNOT BE COMBINED FOR THAT PURPOSE IF THE CHEMICALS HAVE DIFFERENT SPECIFIC CHARACTERISTICS, PARTICULARLY WHERE THE PRIOR ART DOES NOT SUGGEST THE COMBINATION, I.E., OF POLYETHYLENES, MUCH LESS THE COMBINATION OF OXIDIZED AND UNOXIDIZED POLYETHYLENES..... 9

IB. EVEN IF THE ART TEACHES THAT TWO CHEMICALS ARE USEFUL FOR ESSENTIALLY THE SAME GENERAL PURPOSE, IT IS NOT NECESSARILY OBVIOUS TO COMBINE THEM FOR THE SAME PURPOSE, MUCH LESS FOR THE MORE ADVANTAGEOUS PURPOSE ACHIEVED BY THE INVENTION.... 11

II. THE SURPRISING AND UNEXPECTED RESULTS OF THE INVENTION, THAT THE COMBINATION OF TWO DIFFERENT POLYETHYLENES OVERCAME DIS-ADVANTAGES ASSOCIATED WITH EACH INDIVIDUALLY, WAS FULLY SUPPORTED IN THE ORIGINAL SUBMISSION TO THE PATENT OFFICE, INCLUDING EXAMPLES, AND WAS THE BASIS FOR THE PRODUCT INVENTION..... 15

IIIA. THE INGREDIENTS OF APPELLANT'S NON-OBVIOUS COMBINATION WERE THE BASIS OF A NON-OBVIOUS METHOD INVENTION THAT WAS COMPLETELY IGNORED BY THE FEDERAL CIRCUIT IN ITS FURTHER AFFIRMANCE OF THE REJECTION BELOW..... 18

IIIB. THE TEACHING IN REFERENCE KLINKER RELIED UPON BY THE BOARD, BUT IGNORED BY THE FEDERAL CIRCUIT, OF A "SLIGHTLY OXIDIZED" POLYETHYLENE WAX RELEASE LAYER DOES NOT MAKE IT OBVIOUS TO COMBINE AN OXIDIZED POLYETHYLENE WITH AN UNOXIDIZED POLYETHYLENE.....21

IIIC. THE TEACHING IN REFERENCE BOWER OF A LUBRICANT BLEND OF OXIDIZED AND UNOXIDIZED POLYETHYLENES WHICH IS HOMOGENEOUSLY MIXED WITH POLYVINYL CHLORIDE DOES NOT SUGGEST THE INVENTION IN WHICH THE RELEASE IS NOT MIXED WITH THE LAYER BEING RELEASED..... 24

CONCLUSION..... 26

## APPENDIX

COURT OF APPEALS DECISION..... 1a

BOARD OF APPEALS DECISION

APPEAL 86-1039.....5a

APPEAL 86-1040.....14a

## TABLE OF AUTHORITIES

PAGE

**In re Kerkhoven**, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980)..... 8,13, 26

**In re Sarkar**, 588 F.2d 1330, 1334 n.10, 200 USPQ 132, 138 n.10 (CCPA 1978).....8, 16, 26

IN THE

SUPREME COURT OF THE UNITED STATES

ON WRIT OF CERTIORARI

TO THE UNITED STATES COURT OF APPEALS

FOR THE FEDERAL CIRCUIT

Petitioner respectfully requests that a writ of certiorari issue to review the judgement of the United States Court of Appeals for the Federal Circuit in its case Nos. 86-1039 and 86-1040.

The judgment was entered November 12, 1986.

## OPINIONS BELOW

The opinion of the Court of Appeals is unreported and is reprinted in the Appendix to this Petition commencing at page 1a.

The Court of Appeals affirmed an unreported decision of the Patent Office Board of Appeals respectively reprinted commencing at pages 5a and 14a.

## JURISDICTION

This Court has jurisdiction over the judgment entered November 12, 1986 by virtue of 28 U.S.C., Section 1254(1).

## THE CONSTITUTIONAL PROVISIONS AND STATUTES INVOLVED

### U.S. Constitution, Amendment V

"No person shall ... be deprived of life, liberty or property, without due process of law..."

### 35 U.S.C., Section 101

Inventions Patentable

"Whoever invents or discovers any new and useful process...or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title."

## 35 U.S.C., Section 103

Conditions for patentability; non-obvious subject matter.

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

## STATEMENT OF THE CASE

### (a) The Inventions

This case originated as two applications for patent in the U.S. Patent Office under 35 U.S.C. 101-103 for

(1) a composition to transfer decorations from a carrier to an object being decorated, while overcoming and resisting to the discoloration, cracking and crawling of the prior art, by combining a major amount of unoxidized polyethylene and a minor amount of oxidized polyethylene (Appeal 86-1039) and

(2) a method of effecting release using a mixture of major amount of unoxidized polyethylene and a minor amount of oxidized polyethylene (Appeal 86-1040).

A release layer with unoxidized polyethylene alone produces objectionable "cracking" and "crawling". Cracking refers to fissures that appear in transferred decorations. Crawling refers to wrinkling that appears in such decorations.

A release layer with oxidized polyethylene alone produces discolored, i.e., yellowed, decorations.

The objectionable effects of unoxidized polyethylene, when used alone, and the objectionable effects of oxidized polyethylene, when used alone, are overcome by the invention.

Not only does appellant's combination of oxidized and unoxidized polyethylenes reduce haze, cloudiness, crackage and crawling, it also permits paraffin to be added, without the usual "crawl" and

"crackage" associated with paraffin, in order to control viscosity.

**(b) The Decisions of the Board**

In Appeal 86-1039 below, the Board sustained the Final Rejection of claims as prima facie obvious over references Greenman and Margerum et al.

In Appeal 86-1040 below, the Board affirmed the rejection of appealed claims "essentially for the reasons advanced" by the Examiner "in his Answer".

**(c) The Decision of the Federal Circuit**

The Federal Circuit affirmed the final rejections in both Appeals.

A prima facie case of obviousness was said to have been established for the reasons given in the Board's Opinions. It

was said that the Board correctly found that oxidized and unoxidized polyethylenes were known release agents and taught by the prior art to be useful for the same purpose. According to the Federal Circuit, it would be obvious to combine such materials for that purpose, citing In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Appellant's argument rebutting the prima facie case, because of unexpected results, was rejected because this argument allegedly was said not to have been raised before the Board and would not, therefore, be considered for the first time on appeal, citing In re Sarkar, 588 F.2d 1330, 1334 n.10, 200 USPQ 132, 138 n.10 (CCPA 1978).

## ARGUMENT

### IA. TWO CHEMICALS WHICH ARE SAID TO BE USEFUL FOR THE SAME GENERAL PURPOSE CANNOT BE COMBINED FOR THAT PURPOSE IF THE CHEMICALS HAVE DIFFERENT SPECIFIC CHARACTERISTICS, PARTICULARLY WHERE THE PRIOR ART DOES NOT SUGGEST THE COMBINATION, I.E., OF POLYETHYLENES, MUCH LESS THE COMBINATION OF OXIDIZED AND UNOXIDIZED POLYETHYLENES

The Federal Circuit relied on the reasons given by the Patent Office Board of Appeals. The Board stated that a first film in a principal reference Greenman may include a carboxylated polyethylene wax or a non-carboxylated polyethylene wax.

An oxidized polyethylene has carbonyl and other groups. A carboxylated polyethylene has carboxyl groups only.

Consequently, a carboxylated polyethylene is produced by a different method, and has different characteristics than an oxidized polyethylene.

Moreover, the Board admitted that the first film layer in Greenman may include a carboxylated polyethylene wax or a non-carboxylated polyethylene wax.

Even if the Board were correct in stating that a carboxylated wax is oxidized, and a non-carboxylated wax is non-oxidized, there is no basis for combining in a release layer, a major amount of unoxidized polyethylene with a minor amount of unoxidized polyethylene, except in the light of the invention.

In addition, an oxidized polyethylene has carbonyl, ether and carboxyl groups, while a carboxylated polyethylene has

carboxyl groups alone. Consequently, an oxidized polyethylene is different than carboxylated polyethylene.

IB. EVEN IF THE ART TEACHES THAT TWO CHEMICALS ARE USEFUL FOR ESSENTIALLY THE SAME GENERAL PURPOSE, IT IS NOT NECESSARILY OBVIOUS TO COMBINE THEM FOR THE SAME PURPOSE, MUCH LESS FOR THE MORE ADVANTAGEOUS PURPOSE ACHIEVED BY THE INVENTION.

It is acknowledged that reference Greenman teaches that ethylene vinyl acetate may be combined with either a carboxylated polyethylene or a non-carboxylated polyethylene. This does not establish that it would be obvious to combine an oxidized polyethylene with a non-oxidized

polyethylene. Moreover, Applicant's combination does not achieve the same purpose as either component alone. Instead, a more advantageous purpose is achieved.

As noted, the use of oxygenated polyethylene alone produces objectionable yellowing, while unoxygenated polyethylene alone produces objectionable crawling and cracking.

It is, therefore, surprising and unexpected that by combining oxygenated and non-oxygenated polyethylene it is possible to achieve a result that is superior to the use of either alone. The reason is that chemical entities do not always combine and react in a predictable fashion. In fact, in chemical reactions combinations of ingredients sometimes produces surprising and unexpected results, which is the case here.

The citation by the Board of In re Kerkhoven that two chemical entities taught by the art to be useful for essentially the same purpose can be obviously combined for that purpose merely establishes a prima facie case and does not apply here where a superior purpose is achieved. Moreover, as a factual matter, it is incorrect to state that two entities which separately produce the same result will produce that result in combination. Sodium hydroxide is a well known oven cleaner, so is hydrochloric acid. The combination is neither, being salt and water.

It is to be noted, in any event, that the teachings of Greenman do not apply to the proposition advanced by the Board. As noted under Point IA, above, Greenman discloses the alternative use of either a

carboxylated polyethylene or a non-carboxylated polyethylene. Since a non-carboxylated polyethylene is one which merely omits carboxyl groups, it may well contain carbonyl and peroxide groups. Thus, a mixture of a carboxylated polyethylene with a non-carboxylated polyethylene may well result in a mixture of two oxidized polyethylenes.

II. THE SURPRISING AND UNEXPECTED RESULT OF THE INVENTION THAT THE COMBINATION OF TWO DIFFERENT POLYETHYLENES OVERCAME DISADVANTAGES ASSOCIATED WITH EACH INDIVIDUALLY, WAS FULLY SUPPORTED IN THE ORIGINAL SUBMISSION TO THE PATENT OFFICE, INCLUDING EXAMPLES, AND WAS THE BASIS FOR THE PRODUCT INVENTION.

In the present case, it has been noted that unoxidized polyethylene alone is objectionable, and so is oxidized polyethylene alone. What Applicants discovered is that the combination provided by mixing unoxidized and oxidized polyethylenes produces a result which is superior to the use of either alone. These results are set forth in the specification and supporting examples. They were,

therefore, before the Examiner, the Board and the Federal Circuit at all times.

The Federal Circuit has cited In re Sarkar to the contrary (588 F.2d 1334 n.10) but that citation merely states: "This court [Federal Circuit] is required to consider appeals from the PTO on the record made there. 35 USC 144. It is not at liberty to consider issues never raised below". Since the patent application included and identified the unexpected results, that issue was raised below by the very document that was the basis of the examination.

The specification states that in the case of prior U.S. 3,516,904 the release layer is oxidized polyethylene but is objectionable because it produces discolored (yellowish) heat transferred decorations. In the case of prior U.S. 3,516,842 it is known

to use unoxidized polyethylene, but this produces objectionable cracking and crawling.

What the Applicant discovered is that by providing a major amount of oxidized polyethylene and mixing that with a minor amount of unoxidized polyethylene, both objections are significantly and unexpectedly overcome.

IIIA. THE INGREDIENTS OF APPELLANT'S NON-OBVIOUS COMBINATION WERE THE BASIS OF A NON-OBVIOUS METHOD INVENTION THAT WAS COMPLETELY IGNORED BY THE FEDERAL CIRCUIT IN ITS FURTHER AFFIRMANCE OF THE REJECTION BELOW.

The Board relied on a reference Margerum as teaching that the emulsifiable characteristics of polyethylene depend upon the extent to which polyethylene is oxidized. The Board further stated that Margerum suggests including paraffin wax with a polyethylene.

The teaching of Margerum to which the Board has made reference appears in Column 2 of lines 64-67 which state:

> "In accordance with a further aspect of the invention the low molecular weight polyolefin is a polyethylene resin. It may be used in both emulsifiable and non-emulsifiable form."

The Board assumed that an emulsifiable polyethylene is necessarily oxidized and that a non-emulsifiable polyethylene is non-oxidized. There is no such relationship between emulsification and oxidation.

A polyethylene is emulsifiable if it can be held in suspension by an emulsifier such as (1) proteins or carbohydrate polymers which coat the surface of the dispersed particles to prevent them from coalescing, or (2) long chain alcohols and fatty acids which are able to reduce surface tension. The point is there is no necessary connection between emulsifiability and oxidation.

The comment by the Board that reference Greenman teaches the addition of paraffin to a polyethylene also misses the point of the invention, which is that the addition of paraffin to polyethylene alone normally is objectionable, but the addition of paraffin to Applicant's mixture of polyethylenes produces the surprising and unexpected result, noted in Applicant's specification. Paraffin, which otherwise has an undesirable crawling and cracking characteristic for release compositions, can be used, in accordance with the invention, with a blend of oxidized and unoxidized polyethylenes to control viscosity.

IIIB. THE TEACHING IN REFERENCE KLINKER, RELIED UPON BY THE BOARD BUT IGNORED BY THE FEDERAL CIRCUIT, OF A RELEASE LAYER OF "SLIGHTLY OXIDIZED" POLYETHYLENE WAX DOES NOT MAKE IT OBVIOUS TO COMBINE AN OXIDIZED POLYETHYLENE WITH AN UNOXIDIZED POLYETHYLENE.

In ruling that the use of "slightly oxidized" polyethylene wax as a release layer makes it obvious to mix oxidized and unoxidized polyethylene, the Board relied on cited reference Klinker.

Reference Klinker was acknowledged in Applicant's specification. It was noted that in Klinker, the release layer can be "unoxidized polyethylene or a blend of ethyl vinyl acetate copolymer, paraffin, and wax"

(emphasis added). Such a release layer, however, produces objectionable cracking and crawling. It is also noted that in the related Klinker patent U.S. 3,516,904 the release layer is "oxidized" polyethylene (emphasis added). But this is also objectionable because it produces discoloration.

What has been overlooked is that a "slightly oxidized" polyethylene is a different product than a mixture of an unoxidized polyethylene and an oxidized polyethylene. A slightly oxidized polyethylene is a composition in which the relationship between the unoxidized and oxidized molecules is unspecified. In the case of the invention, a prescribed amount of unoxidized polyethylene is mixed or blended with a prescribed amount of oxidized polyethylene.

Moreover, Bower, the second reference relied upon, contradicts the Board. This reference states in Column 2, at lines 19-28, that an oxygen-containing ethylene polymer with an acid number in the range of about 10 to 150 contains a major amount of polymerized ethylene which has been combined with oxygen. Thus, the "slightly oxidized" polyethylene of Klinker with an "acid number of about 11" (emphasis added) (Column 4, lines 37-41) has a major amount of polymerized ethylene which has been combined with oxygen. The reason that Klinker did not realize Applicant's effect is that he did not have a minor amount of oxidized polyethylene.

IIIC. THE TEACHING IN REFERENCE BOWER OF A LUBRICANT BLEND OF OXIDIZED AND UNOXIDIZED POLYETHYLENES WHICH IS HOMOGENEOUSLY MIXED WITH POLYVINYL CHLORIDE DOES NOT SUGGEST THE INVENTION IN WHICH THE RELEASE IS NOT MIXED WITH THE LAYER BEING RELEASED.

In the case of reference Bower relied upon by the Board and ignored by the Federal Circuit, the entire teaching is that a blend of unoxidized and oxidized polyethylenes is homogeneously mixed with polyvinyl chloride or some resinous composition to serve as a lubricant.

There is nothing in Bower to suggest that a blend of unoxidized and oxidized polyethylenes can be used to release a layer from a carrier, without mixing the blend

into the layer being released, and avoid the problems of discoloration and crackage that characterized the prior art.

By contrast with Bower, the invention does not produce a homogeneous mix of a polyethylene blend with a layer. The polyethylene blend instead is used without being mixed in the layer that is being released.

Bower is non-analogous to the invention. A person of ordinary skill seeking to release an intact layer would not look to a reference that requires mixing the release agent with the layer.

The Examiner further insisted that a "blend" is contemplated in Klinker, but this is only a blend of ethylene vinyl acetate and paraffin wax. There is no suggestion whatsoever in Klinker of using a blend of polyethylenes.

## CONCLUSION

In Appeal 86-1039 the Federal Circuit inappropriately relied upon the prior Kerkhoven decision of the CCPA. Moreover, reference Greenman does not teach a combination of polyethylenes in a release composition. It does not even teach the use of oxidized and unoxidized polyethylenes. Nor does reference Margerum.

A combination in accordance with the invention produces the surprising and unexpected result of compensating for the respective disadvantages of oxidized polyethylene and unoxidized polyethylene when used separately in release layers. The Federal Circuit erroneously refused to consider the surprising result on the basis of Sarkar, supra.

In Appeal 86-1040 the Federal Circuit erroneously relied on its decision in Appeal 86-1039, where entirely different references were applied.

Moreover, the "slightly oxidized" polyethylene of reference Klinker has a major amount of oxidized molecules, as confirmed by reference Bower. There is no teaching in the cited art of using a blend of oxidized and unoxidized polyethylene to achieve the intact release of a layer from a

carrier. Bower is non-analogously directed to a lubricant which must be homogeneously mixed into material being processed to prevent sticking.

Respectfully submitted,

George E. Kersey
Attorney for Appellant

Of Counsel:

Barry D. Josephs, Esq.
Thomas O. Hoover, Esq.
Dennison Manufacturing Company
300 Howard Street
Framingham, MA 01701

# APPENDIX

APPENDIX

UNITED STATES COURT OF APPEALS

FOR THE FEDERAL CIRCUIT

IN RE KARL E. HUBBARD ) Appeal Nos. 86-1039

) 86-1040

Appellant

---

DECIDED: November 12, 1986

---

Before FRIEDMAN, Circuit Judge, COWEN, Senior Circuit Judge, and NIES, Circuit Judge.

DECISION

The decision of the United States Patent and Trademark Office Board of Patent Appeals and Interferences, affirming the final rejections of all appealed claims in appellant's patent application Serial Nos. 332,420 and 393,147 under 35 U.S.C. Sec. 103, are affirmed.*/

---

*/ Although appellant's separate appeals of these cases have not been formally consolidated, we are issuing a single opinion because of the similar subject matter of the two applications and because the disposition of these cases is the same.

OPINION

We agree that a prima facie case of obviousness under 35 U.S.C. Sec. 103 has been made out in each instance for the reasons given in the Board's opinions. In particular, the board correctly found that oxidized and unoxidized polyethylene were known release agents, taught by the prior art to be useful for the same purpose. The board, therefore, correctly concluded that it would have been obvious to combine these two materials to form a composition useful for the same purpose. See In re Kerkhoven, 626, F.2d 846, 850, 205 USPQ 1069, 1972 (CCPA 1980).

Appellant argues that he has rebutted the prima facie case in each instance because of unexpected results. Nevertheless, appellant failed to raise this argument before the board, and, therefore, we will not consider it for the first time on appeal. See In re Sarkar, 588 F.2d 1330, 1334 n.10, 200 USPQ 132, 138 n.10 (CCPA 1978).

Art Unit 157 Paper No. 14

Appeal No. 607-87 Mailed Feb. 11, 1986 PAT. & T.M. OFFICE MTC

Heard December 12, 1985

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

---

Ex parte Karl E. Hubbard

- - -

Application for Patent filed June 28, 1982, Serial No. 393,147. Discoloration Resistant Heat Transfer Labeling.

---

George E. Kersey for appellant.

---

Primary Examiner - Theodore Morris

---

Before, Milestone, Steiner and Caroff, Examiners-in-Chief. Caroff, Examiner-in-Chief.

FINAL DECISION

This is an appeal from the final rejection of claims 3 through 8, 15 and 16. Claims 9 through 13, all the other claims remaining the case, stand withdrawn from consideration by the Examiner pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and are thus not before us.

Claim 16 is illustrative of the claimed invention and reads as follows:

16. A heat transfer release composition comprising

a first layer formed by the intermixing of a major amount of unoxidized polyethylene and a minor amount of oxidized polyethylene; and

a second layer constituting a barrier formed by a lacquer selected from the class of materials consisting of aromatic acid-based polyesters, acrylic resins, polyvinylidene chloride copolymers and vinyl acetate/vinyl chloride copolymers.

The references relied upon by the Examiner are:

Greenman et al. (Greenman) 4,235,657
Nov. 25, 1980

Margerum et al. (Margerum) 4,404,249
Sept. 13, 1983

Claims 3 through 8, 15 and 16 stand rejected under 35 USC 103 as being rendered obvious by Margerum and Greenman.

We will sustain this rejection since we find that the subject matter defined by the claims on appeal would have been prima facie obvious from the disclosures of the references relied upon in support of the rejection.

In Greenman, we observe that first film layer 20 serves as a release layer while second film layer 22 serves as a barrier or protective layer in a heat transfer release composition (column 3, lines 16 through 19 and 49 through 58). The second film layer may be composed of an ethylene - acrylic acid copolymer or resin (column 6, lines 52

through 67). Moreover, we interpret Greenman as teaching that the first film layer may include either a carboxylated polyethylene wax or a non-carboxylated polyethylene wax (column 6, lines 3 through 20). The Examiner concludes in his answer that the carboxylated polyethylene wax of Greenman qualifies as an "oxidized polyethylene," to the extent such is recited in the appealed claims. We agree with the Examiner since we note that carboxyl groups contain oxygen atoms; hence polyethylene waxes containing these groups can be said to be "oxidized." Appellant has given us no reason to conclude otherwise.

In our opinion, the teachings of Greenman are sufficient in and of themselves

to establish a prima facie case of obviousness contraindicating patentability of the subject matter on appeal, for it is prima facie obvious to combine two chemical entities (in this case: oxidized and unoxidized polyethylene), each of which is taught in the prior art to be useful for essentially the same purpose, in order to form a composition of the two that is to be used for the same purpose. In re Kerkhoven, 626 F.2d 846, 205 USPQ 1069 (CCPA 1980). Indeed, we note that appellant appears to admit (instant specification: page 2, lines 11 through 20) that it is known to include either oxidized or unoxidized polyethylene in a release layer of a heat transfer label. The teachings of Margerum (column 2,

lines 64 through 67) appear to be to the same effect as well, noting that emulsifiable characteristics of polyethylenes apparently are understood in the art as corresponding to the extent to which they are oxidized as evidenced by the discussion in Greenman (column 6, lines 3 through 20). Additionally, we note that Margerum suggests including a paraffin wax in a release layer in combination with a polyethylene.

As a final matter, we note that at the hearing appellant's representative was specifically asked if he was aware of any other patent applications involving similar subject matter which were filed by appellant. Appellant's representative

responded in the negative. However, it has come to our attention that a related case, Serial No. 332, 420, does indeed exist and is now before the Board of Patent Appeals and Interferences for adjudication in Appeal No. 590-14. We call this fact to the Examiner's attention since he may wish to consider entering a double patenting rejection in the instant case, or in a continuation or divisional application thereof, if appellant chooses to continue prosecution of the subject matter on appeal.

For the foregoing reasons, we affirm the decision of the Examiner.

AFFIRMED.

| | | |
|---|---|---|
| Gordon K. Milestone<br>Examiner-in-Chief | ) | |
| Arthur J. Steiner<br>Examiner-in-Chief | ) | BOARD OF PATENT APPEALS AND INTERFERENCES |
| Marc L. Caroff<br>Examiner-in-Chief | ) | |

George E. Kersey
Dennison Manufacturing Co., Pat. Dept.
300 Howard Street
Framingham, MA 01701

Art Unit 131 Paper No. 16

MAILED
Feb.11 1986
PAT & T.M. OFFICE
BOARD OF APPEALS

Appeal No. 590-14 PSB

Heard:
October 3, 1984

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

---

Ex parte Karl E. Hubbard

- - -

Application for Patent filed December 21, 1981, Serial No. 332,420. This application is a Division of Serial No. 232,449, filed February 9, 1981, abandoned. Discoloration Resistant Heat Transfer Labeling.

---

George E. Kersey et al. for appellant.

---

Supervisory Patent Examiner - Edward Kimlim

Examiner - L. Falasco.

---

Before Milestone, Pellman and Steiner, Examiners-in-Chief. Steiner, Examiner-in-Chief.

FINAL DECISION

This is an appeal from the examiner's refusal to allow claims 14 through 22, which are all of the claims remaining in the application.

The subject matter on appeal is adequately illustrated by claim 14, which reads as follows:

14. The method of releasing a layer from a carrier which comprises using a mixture of a major amount of unoxidized polyethylene and a minor amount of oxidized polyethylene as a release agent between the carrier and the layer.

The references relied upon by the examiner are:

Klinker, Jr. et al. (Klinker) 3,516,842
June 23, 1970

Bower 4,246,150
Jan. 20, 1981

The appealed claims stand rejected under 35 U.S.C. 103 as unpatentable over Klinker considered alone or in view of Bower.

We have considered each of the arguments advanced by the appellant; however, we find ourselves in agreement with the examiner's position with respect to the obviousness of the claimed subject matter. We shall, therefore, affirm the rejection of the appealed claims essentially for the reasons advanced by the examiner in his Answer. The following comments are added for emphasis.

It is initially noted that appellant has not seen fit to separately argue the patentability of the dependent claims which,

therefore, fall with claim 14. In re Kaslow, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983).

Klinker discloses a heat transfer label comprising a polyethylene release layer. In Example 1, it is disclosed that the polyethylene is slightly oxidized which means that the major portion of the polyethylene is unoxidized. We agree with the examiner's position that the "mixture" required by the appealed claims does not exclude the slightly oxidized polyethylene employed by Klinker as a release layer.

At any rate, Klinker also discloses the conventionality of employing highly oxidized aliphatic waxes as release layers in heat transfer labels. It is our opinion that one

having ordinary skill in the art would have found it prima facie obvious to provide release layers comprising oxidized polyethylene, which is embraced by the conventional highly oxidized aliphatic waxes mentioned by Klinker and is in accordance with admittedly conventional practices (Specification, page 2, lines 11-16), together with unoxidized polyethylene, which is also disclosed by Klinker as useful for a release layer. In re Kerkhoven, 626 F.2d 846, 205 USPQ 1069 (CCPA 1980). In so doing, one having ordinary skill in the art would have found it prima facie obvious to optimize the relative amounts of each ingredient of the mixture. In re Boesch, 617, F.2d 272, 205 USPQ 215 (CCPA 1980).

Thus, the examiner's rejection may be sustained solely on the basis of Klinker.

Bower discloses a lubricant comprising a blend of unoxidized polyethylene and oxidized polyethylene, By way of background, Bower discloses that each of oxidized polyethylene and unoxidized polyethylene has been employed as a lubricant for polyvinyl chloride. In view of the conventional use of unoxidized polyethylene and oxidized polyethylene as a lubricant (Bower) and as a release layer in heat transfer labels (Klinker and admitted by appellant), the similarity in function of a lubricant and release layer (to reduce the tendency of a material to stick to a surface) and Bower's use of a blend of

unoxidized polyethylene and oxidized polyethylene as a lubricant, one having ordinary skill in the art would have found it prima facie obvious to formulate a release layer comprising a blend of oxidized polyethylene and unoxidized polyethylene, or to employ Bower's lubricant as a release layer in Klinker's heat transfer label, with the reasonable expectation that it would function effectively. Thus, we also agree with the examiner's conclusion that one having ordinary skill in the art would have found the claimed subject matter prima facie obvious, within the meaning of 35 U.S.C. 103, based upon the combined disclosures of Klinker and Bower.

The examiner should take note of copending application Serial No. 393,147 (Appeal No. 607-87, decided concurrently herewith) involving the use of a release layer comprising oxidized polyethylene and unoxidized polyethylene in a heat transfer label. In the event appellant prosecutes claims similar to those on appeal herein in a continuing application, the examiner may wish to consider the imposition of a rejection based upon double patenting of the obviousness type and/or rely upon the prior art references cited therein as additional evidence of obviousness.

The examiner's rejection of the appealed claims is affirmed.

AFFIRMED

| | | |
|---|---|---|
| Gordon K. Milestone<br>Examiner-in-Chief | ) | |
| Irving R. Pellman<br>Examiner-in-Chief | ) | BOARD OF PATENT APPEALS AND INTERFERENCES |
| Arthur J. Steiner<br>Examiner-in-Chief | ) | |

George E. Kersey et al.
Dennison Manufacturing Company
Patent Department
300 Howard Street
Framingham, MA 01701